



Cost As An Independent Variable (CAIV) Acquisition Strategies: A Brief Overview

9th International Cost/Schedule Performance Conference Tysons Corner, Virginia October 22, 1997

Presented by:

Nicholas A. Koreisha 202/739-8711

Valerie LaPlaca-Mars 202/467-3397



Overview

- What is CAIV?
- CAIV's History and Evolution
- Use of Earned Value Management in CAIV Acquisition
- CAIV's Impact on Acquisition Management
 - Current Trends
 - Future Trends
- Where To Learn More



What is CAIV?

CAIV is DoD's acquisition methodology of making technical and schedule performance a function of available (budgeted) resources.

Strategy

- Aggressively set realistic cost objectives for acquiring and supporting defense systems, and
- Manage programs to meet those objectives.

Approach

- Set realistic but aggressive cost objectives early in each program
- Mange risks to achieve cost, schedule and performance objectives
- Devise metrics for tracking progress in setting and acheiving cost objectives
- Motivate/incentivize government/industry to acheive objectives
- Incentivize operating and support cost reductions for fielded systems

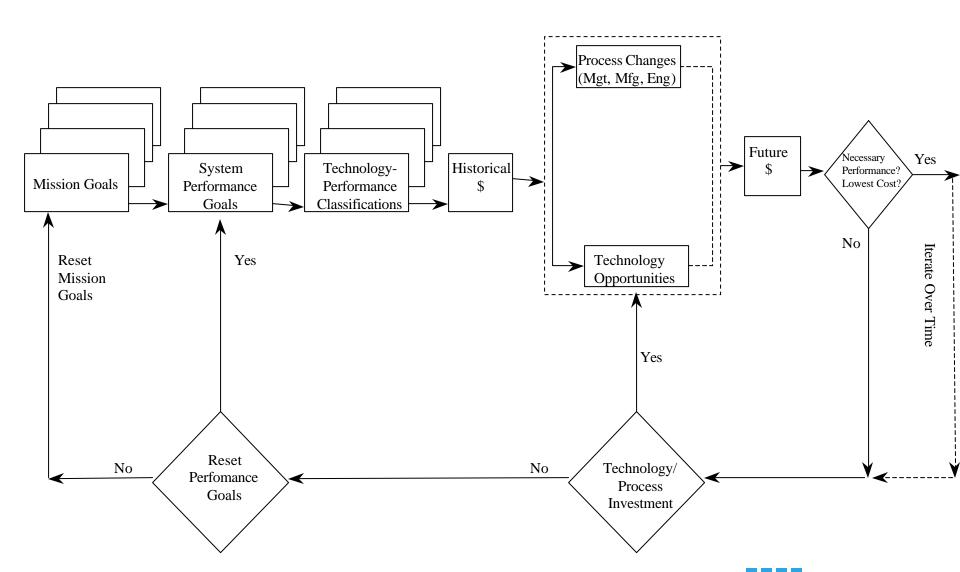


Explained another way...

- Three program performance parameters
 - Technical
 - Schedule
 - Cost (Price)
 - Two of these variables must depend on the third
- Systematic analysis of all life cycle cost elements
 - Acquisition
 - Operations/Support
 - Manpower
 - Modernization
 - Disposal



Cost/Performance Optimization Process





CAIV's History and Evolution

- Based on commercial practice
- History is in the making, now!
 - 1995 1996
 - OSD policy on cost/performance trade-offs
 - Test implementation on flagship Army/Navy/Air Force/Marine Corp programs
 - 1997 1998
 - Services' promulgate policy/guidance documents, business plans
- Why CAIV? Improves systems acquisition cost estimating diligence and program controls.



Use of Earned Value Management in CAIV Acquisition

- CAIV's "first diagnostic of risk management".
- Principle method of validating whether expected cost performance will be met
- Tool for adjusting performance requirements to meet cost objectives
- Performance monitoring (expected life cycle cost validation) conducted on an ongoing basis through all Acquisition phases:
 - Concept Exploration
 - Program Definition and Risk Reduction
 - EMD/LRIP
 - Production, Fielding/Deployment, Operational Support



CAIV's Impact on Acquisition Management: Current Trends

- Increasing rigor in cost modeling
- Cost/Performance Integrated Process Teams (CPIPT)
- Existing data quality/granularity limiting the quality/sophistication of post-acquisition life cycle costing
- New contract incentives
- Program reporting: improved quality



CAIV's Impact on Acquisition Management: Future Trends

- Improved systems engineering performance tradeoff and cost/performance tradeoff tools
- Renewed interest in VECPs as incentives
- Continued risk management method improvements
- Increased use, improvements to technical performance management (TPM)
- Improvements to historical O&S cost databases
- Increased focus on data quality during the cost data collection process
- Increased focus on industry/contractor process cost data associated with Government systems - ABC/ABM



Where to Learn More

- Web Sites
 - http://www.acq.osd.mil/ar/
 - http://www.acq-ref.navy.mil/wcp/civ.html
 - http://www.safaq.hq.af.mil/safaq/acq_pol/caiv.html
 - http://navsea.navy.mil/acquisition-reform/caiv.htm
 - http://www.pricesystems.com/caivsemi.htm
- Future military service guidance documents